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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,954	10/22/2001	Gurtej Sandhu	M4065.0353/P353-A	8784

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DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP
2101 L Street, NW
Washington, DC 20037

EXAMINER

MOORE, KARLA A

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

09/982,954

Applicant(s)

SANDHU ET AL.

Examiner

Karla Moore

Art Unit

1763

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 April 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1,6-13,16,17 and 46-48.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

**PARVIZ HASSANZADEH
SUPERVISORY PATENT EXAMINER**

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant argues that McInerney fails to teach moving a wafer through an inert gas curtain. Examiner disagrees. The gas curtain in McInerney flows downward from an area above which the wafer is lifted (see Figures 10 and 11) for movement from one chamber to the next. Thus, the wafer is moved through the gas curtain and is not lifted above the gas curtain.

With respect to Applicant's assertion that there is no motivation to combine the McInerney reference and the Fong reference, Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motivation for combination is found in Fong who teaches that deposition of a dopant species in a first processing region and transfer to a second processing region, such as an annealing chamber or a rapid thermal process reactor, for the purpose of driving in the dopant atoms (column 41, row 61 through column 42, row 12).

With respect to Applicant's assertion that there is no motivation to combine the Henley reference and the McInerney and Fong references, again, Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In this case, motivation for combination is found in Henley who teaches that providing multiple chambers provided for increased throughput.

With respect to Applicant's argument that there is no reason or motivation to provide McInerney's inert gas curtain with a higher pressure than the first dopant species, Examiner notes that the presence of multiple structures in an apparatus for accomplishing prevention of the same problem (for instance, maintaining a separation of adjacent processing regions) is not nullifying. "Complementary structures" for performing a common task are a well-known concept. In many cases the presence of "complementary structures" (for instance, a physical barrier and a chemical barrier) leads to enhanced results.

With respect to Applicant's argument that the combination of Gattuso with McInerney is improper hindsight reconstruction, Examiner disagrees. Gattuso clearly teaches providing an inert gas curtain at a higher pressure than reaction gases in a reaction area (see abstract).

As noted in the previous office action, Hartig fairly teaches and provides the requisite motivation for providing separate gas exhausts for separate processing regions in McInerney. Further, as was also pointed out in the previous action McInerney also suggests such a feature at column 4, row 67 through column 5, row 2.

Examiner's response to Applicant's arguments against the combination of McInerney and Matijasevic is that, again, the presence of multiple structures in an apparatus for accomplishing prevention of the same problem (for instance, maintaining a separation of adjacent processing regions) is not nullifying. "Complementary structures" for performing a common task are a well-known concept. In many cases the presence of "complementary structures" (for instance, a physical barrier and a chemical barrier) leads to enhanced results.

Examiner does not believe that any of Applicant's arguments provided in the recently filed request for reconsideration overcome the standing rejections, thus, the pending claims stand rejected as discussed in the previous office action and the above remarks.